STIC Search Report
EIC 1700

STIC Database Tracking Number: 98089

TO: Ben Sackey
Location: CM1/3B19/3D19
Art Unit : 1626
July 7, 2003

Case Serial Number: 070033

From: Kathleen Fuller
Location: EIC 1700
CP3/4 3D62
Phone: 308-4290

Kathleen.Fuller@uspto.gov

Search Notes

Mrs Fuller

98089

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: BEM SACKEY Examiner #: 73489 Date: 7/3/03
Art Unit: 1626 Phone Number 305-6889 Serial Number: 10/070,033
Mail Box and Bldg Room Location: CM1 3B19 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

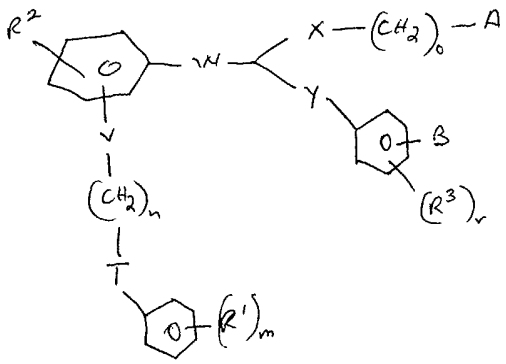
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Novel Derivatives of Dicarboxylic Acid Having Pharmaceutical Properties

Inventors (please provide full names): Markus Heil et al

Earliest Priority Filing Date: 8/31/00

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.



X and Y are each straight chain or branched alkylene having up to 6 carbon atoms.

Please also search the use of the compound or composition in treating hypertension.

Elected species is Example 16 attached to this search.

Thanks.

W → CH=CH
V → -O-
T → is absent
A → COOH, CH_2COOH
B → COOH, CH_2COOH

R^1 - R^3 → are each Hydrogen or branched alkyl chain
n → 1 to 10
m → 1 or 2
o → 1 to 5
v → 0, 1 or 2.

STAFF USE ONLY

Searcher: K. Fuller
Searcher Phone #: _____
Searcher Location: _____
Date Searcher Picked Up: _____
Date Completed: 7/7/03
Searcher Prep & Review Time: 20
Clerical Prep Time: _____
Online Time: 32

Type of Search
NA Sequence (#): _____
AA Sequence (#): _____
Structure (#): 2
Bibliographic: _____
Litigation: _____
Full text: _____
Patent Family: _____
Other: _____

Vendors and cost where applicable
STN ✓
Dialog _____
Questel/Orbit _____
Dr. Link _____
Lexis/Nexis _____
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

=> FILE REG
FILE 'REGISTRY' ENTERED AT 10:54:09 ON 07 JUL 2003

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 JUL 2003 HIGHEST RN 542812-68-0
DICTIONARY FILE UPDATES: 4 JUL 2003 HIGHEST RN 542812-68-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

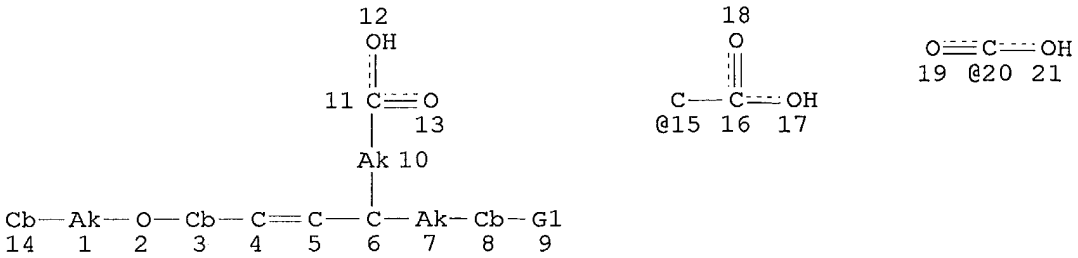
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED AT 10:54:14 ON 07 JUL 2003

FILE COVERS 1907 - 7 Jul 2003 VOL 139 ISS 2
FILE LAST UPDATED: 6 Jul 2003 (20030706/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE
L12 STR



VAR G1=20/15
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 3
GGCAT IS MCY UNS AT 8
GGCAT IS MCY UNS AT 14
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
L14 28 SEA FILE=REGISTRY SSS FUL L12
L15 2 SEA FILE=HCAPLUS ABB=ON L14

28 structures from this query

2 CA references - both applicants

=> D L15 ALL 1-2 HITSTR

L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:208229 HCAPLUS
DN 134:252150
TI Preparation of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compounds as stimulators of soluble guanylate cyclase
IN Alonso-Alija, Cristina; Heil, Markus; Flubacher, Dietmar; Naab, Paul; Stasch, Johannes-peter; Wunder, Frank; Dembowsky, Klaus; Perzborn, Elisabeth; Stahl, Elke
PA Bayer A.-G., Germany
SO PCT Int. Appl., 177 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C07C069-00
CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001019776	A2	20010322	WO 2000-EP8468	20000831
	WO 2001019776	A3	20011129		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
DE 19943634 A1 20010412 DE 1999-19943634 19990913
EP 1216222 A2 20020626 EP 2000-962413 20000831
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
JP 2003509399 T2 20030311 JP 2001-523357 20000831
PRAI DE 1999-19943634 A 19990913
WO 2000-EP8468 W 20000831
OS MARPAT 134:252150
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Use of compds. which are capable of stimulating sol. guanylate cyclase independently of the heme group it contains for prepn. of drugs for treatment of cardiovascular diseases such as angina pectoris, ischemia, and heart failure is claimed. Title compds. [I; B = tetrazolyl, tetrazolylmethylene, CO2H, CH2CO2H, cyano, etc.; T, V = null, O; W = CH2CH2, CH:CH, (CH2)3, CH2CH:CH; X, Y = null, alkylene, O, SCH2, S, SO, SO2; R1, R2, R3 = H, alkyl, alkoxy, halo, CF3, OCF3, cyano; m = 1, 2; n = 1-10; p = 1-5; q = 0-2; with provisos], are claimed. Thus, title compd. (II) showed smooth muscle relaxation in rabbit arterial rings with IC50 = 0.35 nM.

ST phenylcarboxybenzyloctanoate prepn soluble guanylate cyclase inhibitor; cardiovascular agent phenylcarboxybenzyloctanoate prepn; fibrosis treatment phenylcarboxybenzyloctanoate prepn

IT Heart, disease
(angina pectoris, treatment; prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT Carboxylic acids, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dicarboxylic; prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT Vein
(disease, treatment; prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT Liver, disease
(fibrosis, treatment; prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT Antiarteriosclerotics
Anticoagulants
Antihypertensives
Cardiovascular agents
(prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT Fibrosis
Ischemia
(treatment; prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT 330823-26-2P 330823-27-3P 330823-28-4P 330823-29-5P 330823-30-8P

330823-31-9P 330823-32-0P 330823-33-1P 330823-34-2P 330823-35-3P
330823-36-4P 330823-37-5P 330823-39-7P
330823-41-1P 330823-43-3P 330823-45-5P
330823-47-7P 330823-49-9P 330823-50-2P
330823-51-3P 330823-52-4P **330823-53-5P** 330823-54-6P
330823-55-7P **330823-56-8P** 330823-57-9P 330823-58-0P
330823-59-1P 330823-60-4P 330823-62-6P 330823-64-8P 330823-65-9P
330823-66-0P 330823-67-1P 330823-68-2P
330823-69-3P 330823-70-6P 330823-71-7P 330823-72-8P
330823-73-9P 330823-74-0P 330823-75-1P 330823-76-2P 330823-77-3P
330823-78-4P 330823-79-5P 330823-80-8P 330823-81-9P 330823-82-0P
330823-83-1P 330823-84-2P 330823-85-3P **330823-86-4P**
330823-87-5P 330823-88-6P **330823-89-7P 330823-90-0P**
330823-91-1P 330823-92-2P **330823-93-3P** 330823-94-4P
330823-95-5P 330823-96-6P 330823-97-7P 330823-98-8P 330823-99-9P
330824-00-5P 330824-01-6P 330824-02-7P 330824-03-8P 330824-04-9P
330824-05-0P 330824-06-1P 330824-07-2P 330824-08-3P 330824-09-4P
330824-10-7P 330824-11-8P 330824-12-9P 330824-13-0P 330824-14-1P
330824-79-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT 90-01-7, 2-Hydroxybenzyl alcohol 90-02-8, Salicylaldehyde, reactions 96-32-2, Methyl bromoacetate 99-76-3, Methyl 4-hydroxybenzoate 100-39-0, Benzyl bromide 103-63-9, Phenethyl bromide 104-81-4, 4-Methylbenzyl bromide 104-83-6, 4-Chlorobenzyl chloride 402-49-3, 4-Trifluoromethylbenzyl bromide 459-46-1, 4-Fluorobenzyl bromide 588-63-6, 3-Phenoxy-1-bromopropane 589-15-1, 4-Bromobenzyl bromide 611-17-6, 2-Chlorobenzyl bromide 612-13-5, 2-Cyanobenzyl chloride 637-59-2, 1-Phenyl-3-bromopropane 835-78-9, 2-(2-Phenylethyl)benzyl alcohol 1200-03-9, 4-Phenoxy-1-bromobutane 1467-05-6, 4-Ethylbenzyl chloride 1586-00-1, 2-Benzylbenzyl alcohol 1797-75-7, Diallyl malonate 2417-73-4, Methyl 2-bromomethylbenzoate 3095-95-2 3337-59-5, Methyl 3,5-dichloro-4-hydroxybenzoate 7405-12-1, 2-Hydroxy-4-methylbenzyl alcohol 13398-94-2, 2-(3-Hydroxyphenyl)ethanol 13633-25-5, 4-Phenylbutyl bromide 14469-83-1, 5-Phenylpentyl bromide 14525-71-4 18880-00-7, 4-tert-Butylbenzyl bromide 20443-98-5, 2,6-Dichlorobenzyl bromide 27976-27-8, 6-Phenylhexyl bromide 34040-63-6 34040-64-7, Methyl 4-(chloromethyl)benzoate 35444-44-1, Adipic acid monomethyl ester chloride 64407-07-4 70340-04-4 84109-76-2 126907-58-2 329980-75-8 330824-77-6 330824-78-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT 3381-87-1P 108683-50-7P 116585-12-7P 126907-30-0P 126907-51-5P
135055-19-5P 135055-35-5P 212116-73-9P 329979-13-7P 329979-15-9P
329980-67-8P 329980-68-9P 329980-69-0P 329980-70-3P 330824-15-2P
330824-16-3P 330824-17-4P 330824-18-5P 330824-19-6P 330824-20-9P
330824-22-1P 330824-23-2P 330824-24-3P 330824-25-4P 330824-26-5P
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330824-32-3P 330824-33-4P 330824-34-5P 330824-35-6P 330824-36-7P
330824-37-8P 330824-38-9P 330824-39-0P 330824-40-3P 330824-42-5P
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330824-50-5P 330824-51-6P 330824-52-7P 330824-53-8P 330824-54-9P
330824-55-0P 330824-56-1P 330824-57-2P 330824-58-3P 330824-59-4P
330824-60-7P 330824-61-8P 330824-62-9P 330824-63-0P 330824-64-1P

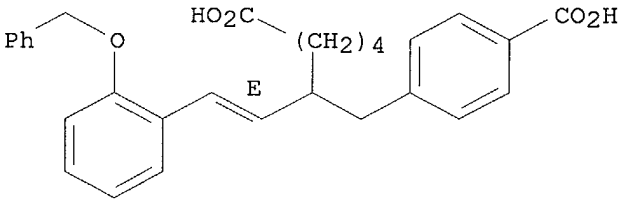
330824-65-2P 330824-66-3P 330824-67-4P 330824-68-5P 330824-69-6P
330824-70-9P 330824-71-0P 330824-72-1P 330824-73-2P 330824-74-3P
330824-75-4P 330824-76-5P 330825-15-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT 9054-75-5, Guanylate cyclase
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(stimulators; prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

IT **330823-36-4P 330823-37-5P 330823-41-1P**
330823-43-3P 330823-45-5P 330823-47-7P
330823-49-9P 330823-50-2P 330823-51-3P
330823-53-5P 330823-56-8P 330823-66-0P
330823-67-1P 330823-68-2P 330823-69-3P
330823-70-6P 330823-86-4P 330823-89-7P
330823-90-0P 330823-93-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 8-phenyl-6-(4-carboxybenzyl)octanoates and related compds. as stimulators of sol. guanylate cyclase)

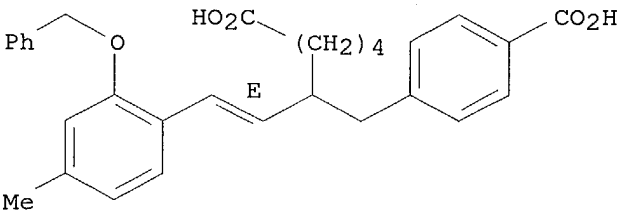
RN 330823-36-4 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-(phenylmethoxy)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 330823-37-5 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[4-methyl-2-(phenylmethoxy)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

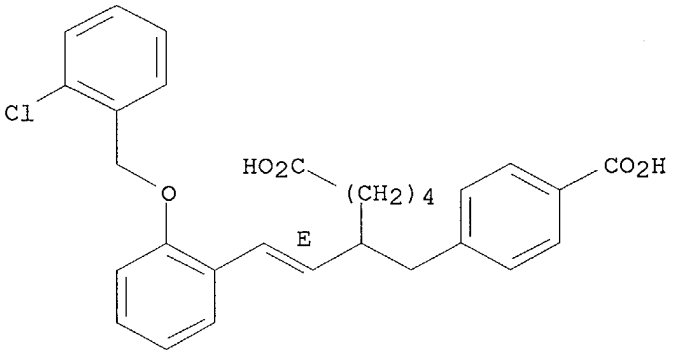
Double bond geometry as shown.



RN 330823-41-1 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(2-

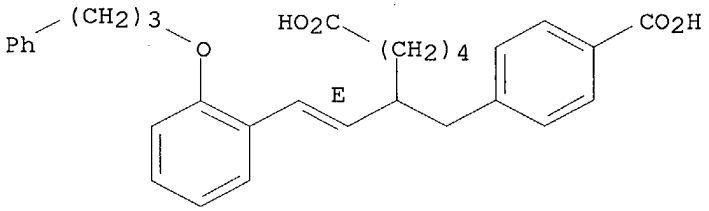
chlorophenyl)methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



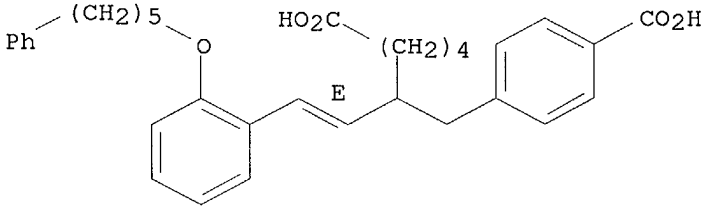
RN 330823-43-3 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-(3-phenylpropoxy)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



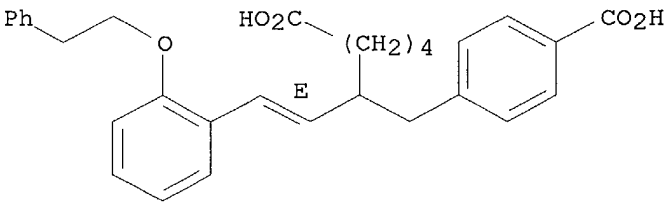
RN 330823-45-5 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(5-phenylpentyl)oxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 330823-47-7 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-(2-phenylethoxy)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 330823-49-9 HCAPLUS
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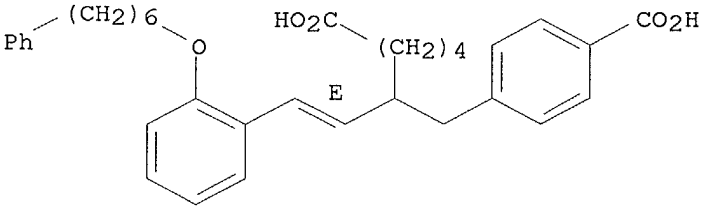
Double bond geometry as shown.



RN 330823-50-2 HCAPLUS
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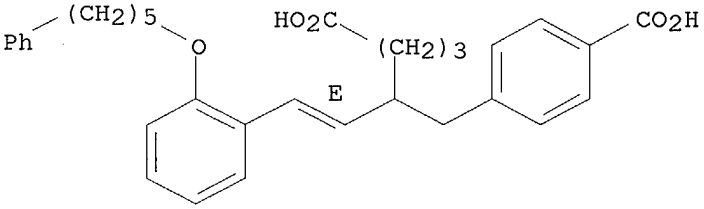
Double bond geometry as shown.



RN 330823-51-3 HCAPLUS
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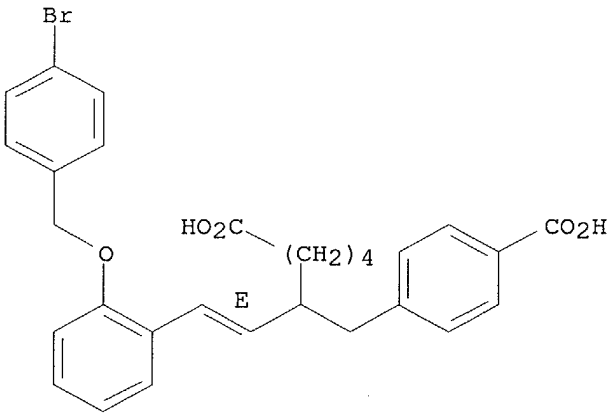
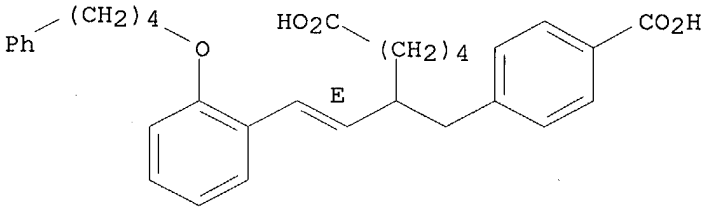
Double bond geometry as shown.



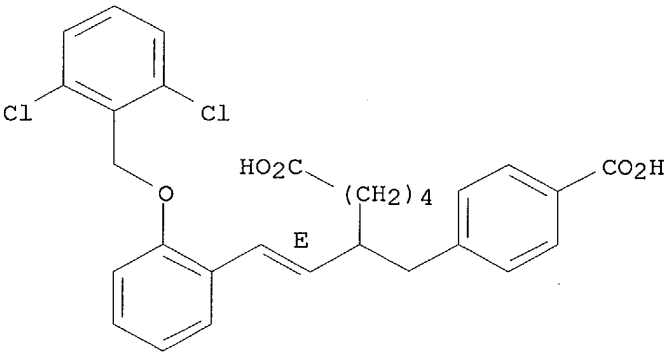
RN 330823-53-5 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-(4-phenylbutoxy)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



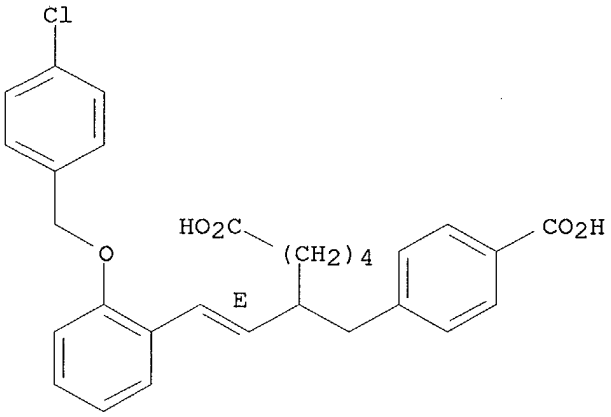
RN 330823-56-8 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(2,6-dichlorophenyl)methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



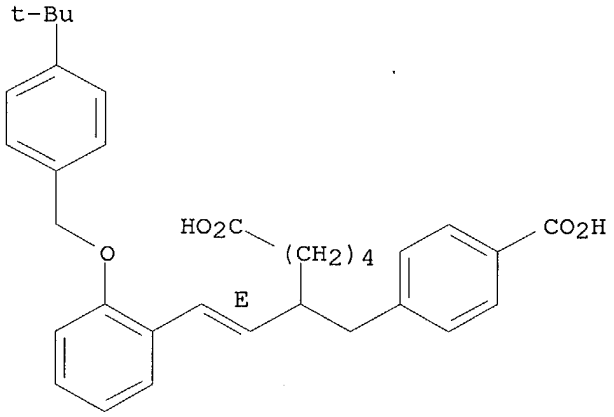
RN 330823-66-0 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(4-chlorophenyl)methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



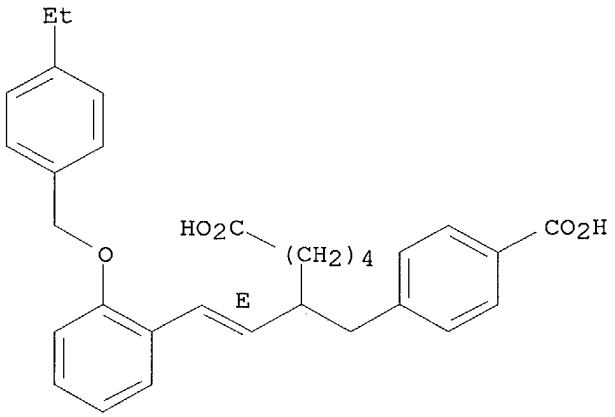
RN 330823-67-1 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[[4-(1,1-dimethylethyl)phenyl]methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



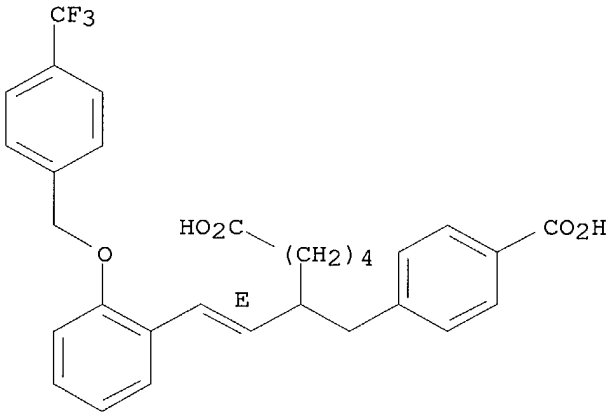
RN 330823-68-2 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(4-ethylphenyl)methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



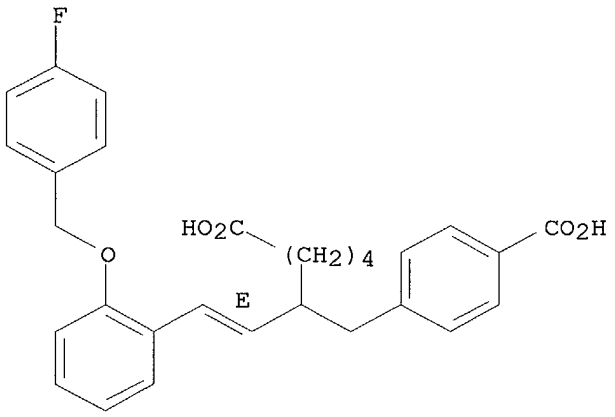
RN 330823-69-3 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[[4-(trifluoromethyl)phenyl]methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



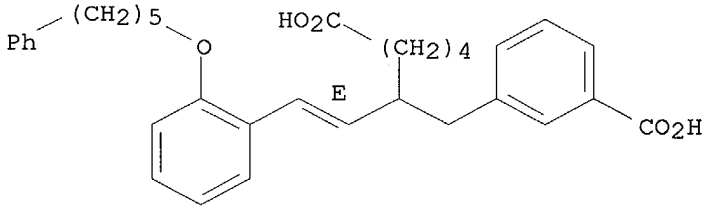
RN 330823-70-6 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(4-fluorophenyl)methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 330823-86-4 HCAPLUS
CN Benzeneheptanoic acid, 3-carboxy-.epsilon.-[(1E)-2-[2-[(5-phenylpentyl)oxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 330823-89-7 HCAPLUS
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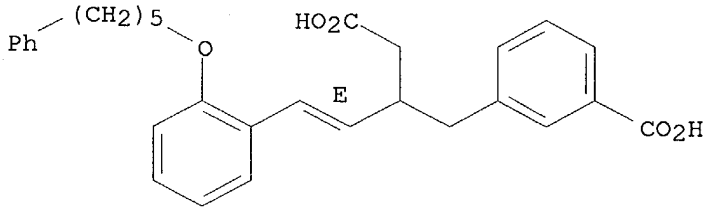
Double bond geometry as shown.



RN 330823-90-0 HCAPLUS
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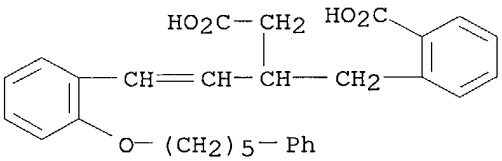

RN 330823-93-3 HCAPLUS
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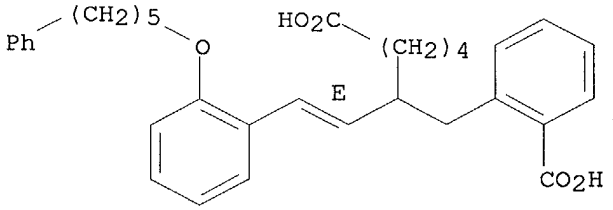
Double bond geometry as shown.



L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:179724 HCAPLUS
DN 134:237303
TI Preparation of carboxybenzylalkanoates as stimulators of soluble guanylate cyclase.
IN Alonso-Alija, Cristina; Heil, Markus; Flubacher, Dietmar; Naab, Paul; Stasch, Johannes-peter; Wunder, Frank; Dembowsky, Klaus; Perzborn, Elisabeth; Stahl, Elke
PA Bayer AG, Germany
SO Ger. Offen., 138 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C07C065-28
ICS C07C069-76; C07C229-38; C07C065-21; C07C217-36; C07D213-63; C07D227-04; C07D247-00; C07D269-00; C07D333-06; A61K031-19
CC 25-17 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 28
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19943636	A1	20010315	DE 1999-19943636	19990913
WO 2001019778	A1	20010322	WO 2000-EP8466	20000831

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 2000014178 A 20020514 BR 2000-14178 20000831
EP 1216223 A1 20020626 EP 2000-964067 20000831
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
JP 2003509400 T2 20030311 JP 2001-523359 20000831
PRAI DE 1999-19943636 A 19990913
WO 2000-EP8466 W 20000831
OS MARPAT 134:237303
AB Use of compds. which stimulate sol. guanylate cyclase independently of the heme group in the enzyme for prepn. of drugs for treatment of cardiovascular diseases such as angina pectoris, ischemia, and heart failure is claimed. Thus, 2-methoxybenzyltriphenylphosphonium bromide in THF at 0.degree. was treated with BuLi; after 30 min. Me 6-formyl-7-(4-methoxycarbonylphenyl)heptanecarboxylate in THF was added followed by stirring for 30 min. at 0.degree. to give 25.8% Me 6-(4-methoxycarbonylbenzyl)-8-(2-methoxyphenyl)-7-octenoate. Title compds. showed blood vessel relaxing activity with IC50 = 0.2-3500 nM.
ST carboxybenzylalkanoate prepn soluble guanylate cyclase stimulator; cardiovascular agent carboxybenzylalkanoate prepn; angina pectoris treatment carboxybenzylalkanoate prepn; heart failure treatment carboxybenzylalkanoate prepn; ischemia treatment carboxybenzylalkenoate prepn
IT Heart, disease
(angina pectoris, treatment; prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT Vein
(disease, treatment; prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT Heart, disease
(failure, treatment; prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT Antiarteriosclerotics
Anticoagulants
Antihypertensives
(prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT Ischemia
(treatment; prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT 329980-04-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(a fprepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT 14047-53-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(a ohprepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
IT 329984-94-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nod nprepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)
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329978-89-4P 329978-90-7P 329978-91-8P 329978-92-9P 329978-93-0P
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329979-58-0P 329979-59-1P **329979-60-4P** 329979-61-5P
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330184-18-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)

IT 62-53-3, Aniline, reactions 90-01-7, 2-Hydroxybenzyl alcohol 90-02-8, Salicylaldehyde, reactions 92-54-6, N-Phenylpiperazine 98-17-9, 3-Trifluoromethylphenol 99-76-3, Methyl 4-hydroxybenzoate 100-39-0, Benzyl bromide 100-46-9, Benzylamine, reactions 100-51-6, Benzyl alcohol, reactions 109-01-3 109-65-9, Butyl bromide 109-97-7, Pyrrole 110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions 111-24-0, 1,5-Dibromopentane 111-25-1, Hexyl bromide 111-83-1, Octyl bromide 111-95-5 112-82-3, Hexadecyl bromide 123-75-1, Pyrrolidine, reactions 150-76-5, 4-Methoxyphenol 346-06-5, 2-Trifluorobenzyl alcohol 349-75-7, 3-Trifluorobenzyl alcohol 456-41-7, 3-Fluorobenzyl bromide 612-16-8, 2-Methoxybenzyl alcohol 626-16-4, 1,3-Bis(chloromethyl)benzene 1571-08-0, Methyl 4-formylbenzoate 1722-07-2, 2-Benzylaminobenzyl alcohol 1736-74-9, 4-Trifluoromethoxybenzyl alcohol 1822-94-2 2567-29-5, 4-Phenylbenzyl bromide 2577-48-2, L-Proline methyl ester 2696-85-7, 2-Butylaniline 2759-28-6, N-Benzylpiperazine 2928-43-0, 2-Phenylbenzyl alcohol 2942-59-8, 2-Chloronicotinic acid 3095-95-2 3163-27-7, 1-Bromomethylnaphthalene 3240-94-6 4282-40-0, Heptyl iodide 4463-31-4, 4-Cyclohexylbenzyl chloride 4521-45-3 4771-31-7, 4-Chloromethyl-2-phenylthiazole 5006-62-2, 3-Ethoxycarbonylpiperidine

5653-67-8, 2,3-Dimethoxybenzyl alcohol 5680-79-5, Glycine methyl ester hydrochloride 6214-45-5, 4-Butoxybenzyl alcohol 6272-38-4, 2-Benzyloxyphenol 6436-90-4, N-Benzylglycine ethyl ester 6905-05-1 10133-20-7 13200-60-7, Sarcosine ethyl ester 13807-84-6, 2-Phenoxybenzyl alcohol 13826-35-2, 3-Phenoxybenzyl alcohol 13889-98-0, N-Acetylpiperazine 14469-83-1, 5-Phenylpentyl bromide 15862-72-3, 2-Ethoxycarbonylpiperidine 17325-26-7, 4-Methoxycarbonylimidazole 18880-00-7, 4-tert-ButylBenzyl bromide 19853-09-9, 2-Phenylbenzyl bromide 20012-63-9, 2-Benzyloxyaniline 25542-62-5, Ethyl 6-bromohexanoate 33524-31-1, 2,5-Dimethoxybenzyl alcohol 34932-07-5 35444-44-1, Adipic acid monomethyl ester chloride 39546-32-2, 4-Piperidinecarboxamide 54777-65-0, 4-Acetamidobenzyl chloride 60789-54-0 70340-04-4, 2-Hydroxybenzyltriphenylphosphonium bromide 73217-31-9 80676-35-3 85684-64-6 88489-87-6 103010-41-9 107355-79-3, 2-(5-Bromopentyl)furan 108683-50-7 111818-34-9 126907-57-1 126907-58-2 142837-88-5, 2-(5-Bromopentyl)thiophene 150253-59-1 226250-00-6 242812-04-0 287176-81-2 329980-73-6 329980-74-7 329980-75-8 329980-76-9 329980-77-0 329980-78-1 329980-79-2 329980-80-5 329980-81-6 329980-82-7 329980-83-8 329980-84-9 329984-92-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)

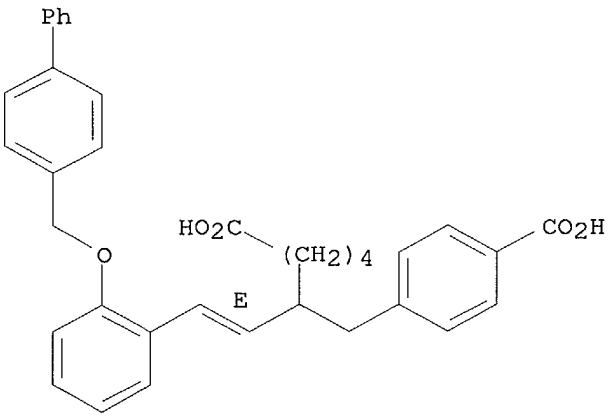
IT 3351-71-1P 6513-49-1P 14178-18-8P 25224-32-2P 64820-07-1P 87328-76-5P 89820-49-5P 116585-12-7P 135055-35-5P 137393-20-5P 329980-38-3P 329980-39-4P 329980-40-7P 329980-41-8P 329980-42-9P 329980-43-0P 329980-44-1P 329980-45-2P 329980-46-3P 329980-47-4P 329980-48-5P 329980-49-6P 329980-50-9P 329980-51-0P 329980-52-1P 329980-53-2P 329980-54-3P 329980-56-5P 329980-57-6P 329980-58-7P 329980-59-8P 329980-60-1P 329980-61-2P 329980-62-3P 329980-63-4P 329980-64-5P 329980-65-6P 329980-66-7P 329980-67-8P 329980-68-9P 329980-69-0P 329980-70-3P 329980-71-4P 329980-72-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)

IT 9054-75-5, Guanylate cyclase
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(sol. guanylate cyclase stimulators; prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)

IT **329978-95-2P 329979-40-0P 329979-50-2P 329979-52-4P 329979-53-5P 329979-54-6P 329979-60-4P 329984-96-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of carboxybenzylalkanoates as stimulators of sol. guanylate cyclase)

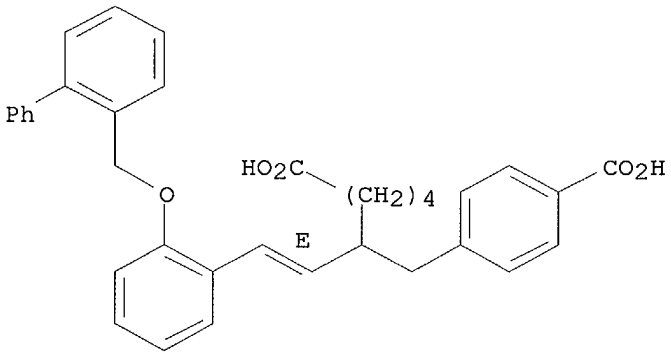
RN 329978-95-2 HCAPLUS
CN Benzeneheptanoic acid, .epsilon.-[(1E)-2-[2-([1,1'-biphenyl]-4-ylmethoxy)phenyl]ethenyl]-4-carboxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



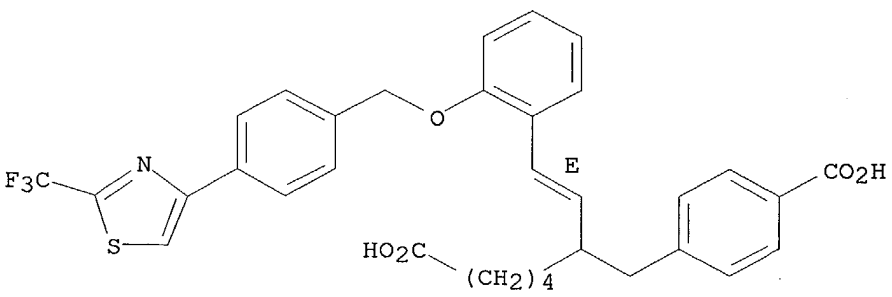
RN 329979-40-0 HCAPLUS
CN Benzeneheptanoic acid, .epsilon.-[(1E)-2-[2-([1,1'-biphenyl]-2-ylmethoxy)phenyl]ethenyl]-4-carboxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



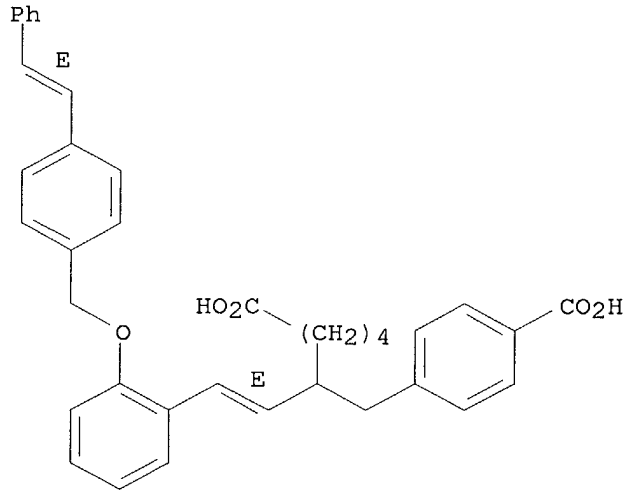
RN 329979-50-2 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[[4-[2-(trifluoromethyl)-4-thiazolyl]phenyl]methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



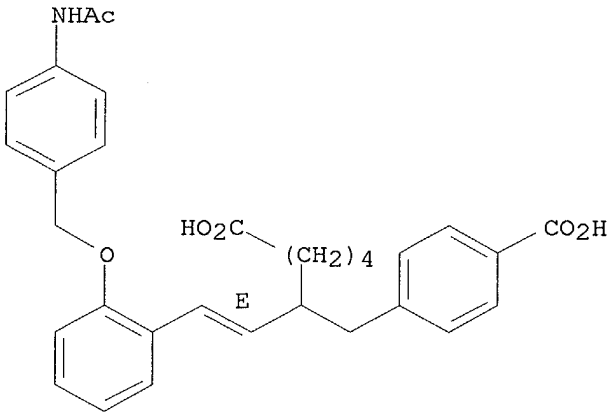
RN 329979-52-4 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[[4-[(1E)-2-phenylethenyl]phenyl]methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



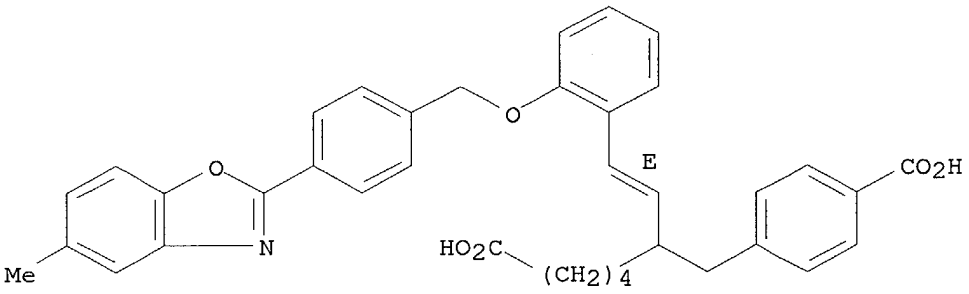
RN 329979-53-5 HCAPLUS
CN Benzeneheptanoic acid, .epsilon.-[(1E)-2-[2-[[4-(acetylamino)phenyl]methoxy]phenyl]ethenyl]-4-carboxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



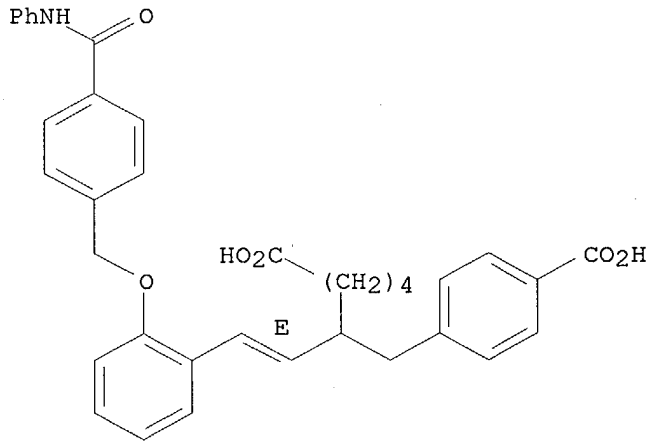
RN 329979-54-6 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[[4-(5-methyl-2-benzoxazolyl)phenyl]methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 329979-60-4 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[[4-[(phenylamino)carbonyl]phenyl]methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 329984-96-5 HCAPLUS
CN Benzeneheptanoic acid, 4-carboxy-.epsilon.-[(1E)-2-[2-[(4-cyclohexylphenyl)methoxy]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.